

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 CompuGen Ltd.

OM protein - protein search, using SW model

Run on: November 27, 2002, 05:38:32 : Search time 8.28185 Seconds  
(without alignments)

241.342 Million cell updates/sec

Title: US-09-893-615-2

Sequence: 1 WHWRRHPIQLAAGR 15

Scoring table: BLOSUM62  
Gapop 10.0, Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Database:

Listing first 45 summaries

1: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1980.DAT:\*  
2: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1981.DAT:\*  
3: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1982.DAT:\*  
4: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1983.DAT:\*  
5: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1984.DAT:\*  
6: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1985.DAT:\*  
7: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1986.DAT:\*  
8: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1987.DAT:\*  
9: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1988.DAT:\*  
10: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1989.DAT:\*  
11: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1990.DAT:\*  
12: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1991.DAT:\*  
13: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1992.DAT:\*  
14: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1993.DAT:\*  
15: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1994.DAT:\*  
16: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1995.DAT:\*  
17: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1996.DAT:\*  
18: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1997.DAT:\*  
19: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1998.DAT:\*  
20: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA1999.DAT:\*  
21: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2000.DAT:\*  
22: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2001.DAT:\*  
23: /SIDS2/gcgdata/geneseq/geneseq-emb1/AA2002.DAT:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	91	100.0	15	AAW12276	Synthetic library
2	91	100.0	15	AAW1334	A glycolipid sugar
3	91	100.0	15	AAW94702	Lipoteichoic acid
4	91	100.0	15	AAW1987	Beta-2GPI Ab bindi
5	91	100.0	15	AAW13358	Exemplary pharmino
6	91	100.0	19	AAW94729	Sequence 15mer2-2b/
7	91	100.0	19	AAW94710	Sequence 15mer2-19
8	91	100.0	19	AAW94721	Sequence 15mer2-1/
9	91	100.0	19	AAW94705	Sequence 15mer2-7/
10	91	100.0	19	AAW94709	

11	91	100.0	37	AAW12287	Synthetic template
12	80	87.9	19	AAW94708	Sequence 15mer2-5/
13	69	75.8	15	AAW12277	Synthetic library
14	56	61.5	11	AAW03372	Peptide #6 which b
15	56	61.5	15	AAW03374	Peptide #8 which b
16	51	56.0	159	AAW035894	Novel human diagno
17	50	54.9	11	AAW03373	Peptide #7 which b
18	50	54.9	15	AAW03375	Peptide #9 which b
19	50	54.9	139	AAW03778	Human peptide #429
20	50	54.9	139	AAW03778	Human peptide #429
21	50	54.9	139	AAW03778	Human peptide #429
22	50	54.9	139	AAW03778	Human peptide #429
23	50	54.9	139	AAW03778	Human peptide #429
24	50	54.9	139	AAW03778	Human peptide #429
25	50	54.9	139	AAW03778	Human peptide #429
26	50	54.9	139	AAW03778	Human peptide #429
27	50	54.9	139	AAW03778	Human peptide #429
28	49	53.8	157	AAW03778	Human peptide #429
29	49	53.8	157	AAW03778	Human peptide #429
30	46.5	51.1	74	AAW03778	Human peptide #429
31	46	50.5	11	AAW03778	Human peptide #429
32	46	50.5	15	AAW03778	Human peptide #429
33	46	50.5	15	AAW03778	Human peptide #429
34	46	50.5	15	AAW03778	Human peptide #429
35	44.5	48.9	285	AAW1648	Human foetal prote
36	44.5	48.9	298	AAW02727	Human foetal prote
37	44.5	48.9	298	AAW02727	Human foetal prote
38	44.5	48.9	343	AAW02727	Human foetal prote
39	44	48.4	305	AAW02727	Human foetal prote
40	43.5	47.8	74	AAW02727	Human foetal prote
41	43.5	47.8	385	AAW02727	Human foetal prote
42	43	47.3	51	AAW02727	Human foetal prote
43	43	47.3	11	AAW02727	Human foetal prote
44	43	47.3	11	AAW02727	Human foetal prote
45	43	47.3	367	AAW02727	Human foetal prote

#### ALIGNMENTS

4648

RESULT 1	AAW12276	standard; peptide: 15 AA.
ID	AAW12276	
AC	AAW12276	
XX	15-Apr-1997	(first entry)
DE	Synthetic library peptide #1 which binds anti-T. gondii p30 antibody.	
XX	Toxoplasma gondii; surface protein; antibody; screening; peptide library;	
RW	diagnostic assay; immunisation; phage; fusion protein; envelop.	
KW	Synthetic.	
XX	EP724016-A1.	
OS	31-JUL-1996.	
XX	29-JAN-1996;	96EP-0420030.
XX	30-JAN-1995;	95PR-0001297.
XX	(JOLI/) JOLIVET-REYNARD C.	
PA	(JOLI/) JOLIVET-REYNARD C.	
XX	Jolivet-Reynard C;	
PI	WPI; 1996-343531/35.	
DR	New polypeptide reactive with anti-p30 antibodies against Toxoplasma	
PT	gondii - useful for diagnosis of immunisation, also new nucleic	
PR	acid, vectors and transformed cells	

XX Example 2; Page 7; 33pp; French.

XX The invention relates to novel peptides which bind to antibodies which  
CC recognise the Toxoplasma gondii p30 envelop protein. A peptide library  
CC was generated to express pentadecapeptides on the surface of a  
CC filamentous phage as a fusion protein with the pIII protein. The library  
CC was screened with immobilised anti-T. gondii p30 protein antibody 1E1E7.  
CC Phages which bind this antibody were recovered and amplified by one  
CC round of infection in E. coli. The resultant phages were rescreened with  
CC the immobilised antibody and the second round screen isolated 58  
CC bacterial colonies infected with phage. Of the 58 colonies, phage DNA  
CC from 30 colonies was isolated and sequenced to determine the sequence of  
CC the pentadecapeptide encoded. The peptide sequences AAW12276-86 were  
CC identified. Of the 30 colonies studied, this peptide sequence was  
CC encoded 11 times. A template peptide sequence (AAW12287) corresponding  
CC to the sequence across the phage pIII sequence and putative  
CC pentadecapeptide was used to generate a series of overlapping  
CC pentadecapeptides. These peptides were used to determine the best  
CC peptide sequence which binds the 1E1E7 antibody. Peptides AAW03367-75  
CC were isolated. The new peptides can then be used in diagnostic assays to  
CC detect T. gondii antibodies in a sample or to purify anti-p30 antibodies  
CC or for active immunisation against T. gondii.

XX Sequence 15 AA:

Query Match 100.0%; Score 91; DB 17; Length 15;

Best Local Similarity 100.0%; Pred. No. 1.5e-08;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 WHRRHRIPQLAAGR 15

DB 1 WHRRHRIPQLAAGR 15

RESULT 2

AAW71334

ID AAW71334 standard; peptide: 15 AA.

AC AAW71334;

DT 25-NOV-1998 (first entry)

DE A glycolipid sugar chain peptide.

KW Glycolipid sugar chain; inhibit; adhesion; metastasis; cancer cell.

XX Synthetic.

PN JP10237099-A.

PD 08-SEP-1998.

PF 26-FEB-1997; 97JP-0042311.

PR 26-FEB-1997; 97JP-0042311.

PA (IMMO ) IMMUNO JAPAN INC.

DR WPI; 1998-537488/46.

XX New peptide which reacts specifically with antibody against  
PT glyco-lipid sugar chains - useful for inhibition of cancer  
PT metastasis

PS Claim 8; Page 3; 7pp; Japanese.

CC AAW71332-36 represent glycolipid sugar chain replica peptides. They  
CC react specifically with an antibody against glycolipid sugar chains  
CC and inhibit adhesion and metastasis of cancer cells to a target cell.  
CC The peptides can be used to prevent cancer metastasis.

XX Sequence 15 AA:

Query Match 100.0%; Score 91; DB 19; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.5e-08;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 WHRRHRIPQLAAGR 15

DB 1 WHRRHRIPQLAAGR 15

RESULT 3

ID AAW94702

AC AAW94702 standard; peptide: 15 AA.

DT 22-APR-1999 (first entry)

DE Lipoteichoic acid epitope peptide mimic for Mab 96-110.

KW Monoclonal antibody; Mab; lipoteichoic acid; gram positive; bacteria;  
KW immunoglobulin; phagocytosis; infection; epitope; peptide mimic;

KM Mab 96-110.

XX Staphylococcus sp.

OS Staphylococcus sp.

PN WO9857994-A2.

PD 23-DEC-1998.

PF 16-JUN-1998; 98WO-US12402.

PR 16-JUN-1997; 97US-0049871.

PA (JACK-) JACKSON FOUND ADVANCEMENT MILITARY MED.

PI Fischer GW, Schuman RF, Stinson JL, Wong H;

DR WPI; 1999-095329/08.

XX New antibodies to lipoteichoic acid of gram positive bacteria - used  
PT to develop products for the diagnosis, prevention and treatment of  
PT infections caused by gram positive bacteria

PS Claim 16; Page 120; 150pp; English.

CC The invention relates to a monoclonal antibody (MAB) to lipoteichoic acid  
CC of gram positive bacteria, where the MAB is a chimeric immunoglobulin  
CC comprising at least part of a human immunoglobulin constant region and  
CC at least part of a non-human immunoglobulin variable region having  
CC specificity to lipoteichoic acid of gram positive bacteria. The  
CC antibodies bind to whole bacteria and enhance phagocytosis and killing of  
CC the bacteria and enhance protection from lethal infection. The antibodies  
CC or peptides (encoded by a DNA of the variable region of anti-lipoteichoic  
CC acid antibody or characterised by amino acids corresponding to one or  
CC more of the complementarity determining regions (CDRs) of the variable  
CC region of the antibody) can be used for treating or preventing infections  
CC caused by gram positive bacteria. They can also be used for the diagnosis  
CC of gram positive bacterial infections. The present sequence represents a  
CC specifically claimed lipoteichoic acid epitope peptide mimic that can be  
CC bound by the antibody of the invention (Mab 96-110).

XX Sequence 15 AA:

Query Match 100.0%; Score 91; DB 20; Length 15;

Best Local Similarity 100.0%; Pred. No. 1.5e-08;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 WHRRHRIPQLAAGR 15

DB 1 WHRRHRIPQLAAGR 15

ID	Sequence	Score	DB	Length	Mismatches	Gaps
XX	ABB73358: Peptide: 15 AA.	100.0%	91	15	0	0
XX	ABB73358:	100.0%	91	15	0	0
DT	05-APR-2002 (first entry)					
XX	Exemplary pharmacologically active peptide sequence					
XX	Modified peptide; mimetic; Fc domain; fusion; 15 AA.					
XX	EPO: erythropoietin; TPO: tumor necrosis factor; TNF- $\alpha$ inhibitor; interleukin 1 antagonist; IL-1					
XX	TPO mimetic peptide; EPO mimetic peptide; EPO, VEGF, bFGF, PDGF, TGF- $\beta$ , IGF-1, FGF, HGF, KGF, LIF, MIP, MIP-1, MIP-2, MIP-3, MIP-4, MIP-5, MIP-6, MIP-7, MIP-8, MIP-9, MIP-10, MIP-11, MIP-12, MIP-13, MIP-14, MIP-15, MIP-16, MIP-17, MIP-18, MIP-19, MIP-20, MIP-21, MIP-22, MIP-23, MIP-24, MIP-25, MIP-26, MIP-27, MIP-28, MIP-29, MIP-30, MIP-31, MIP-32, MIP-33, MIP-34, MIP-35, MIP-36, MIP-37, MIP-38, MIP-39, MIP-40, MIP-41, MIP-42, MIP-43, MIP-44, MIP-45, MIP-46, MIP-47, MIP-48, MIP-49, MIP-50, MIP-51, MIP-52, MIP-53, MIP-54, MIP-55, MIP-56, MIP-57, MIP-58, MIP-59, MIP-60, MIP-61, MIP-62, MIP-63, MIP-64, MIP-65, MIP-66, MIP-67, MIP-68, MIP-69, MIP-70, MIP-71, MIP-72, MIP-73, MIP-74, MIP-75, MIP-76, MIP-77, MIP-78, MIP-79, MIP-80, MIP-81, MIP-82, MIP-83, MIP-84, MIP-85, MIP-86, MIP-87, MIP-88, MIP-89, MIP-90, MIP-91, MIP-92, MIP-93, MIP-94, MIP-95, MIP-96, MIP-97, MIP-98, MIP-99, MIP-100, MIP-101, MIP-102, MIP-103, MIP-104, MIP-105, MIP-106, MIP-107, MIP-108, MIP-109, MIP-110, MIP-111, MIP-112, MIP-113, MIP-114, MIP-115, MIP-116, MIP-117, MIP-118, MIP-119, MIP-120, MIP-121, MIP-122, MIP-123, MIP-124, MIP-125, MIP-126, MIP-127, MIP-128, MIP-129, MIP-130, MIP-131, MIP-132, MIP-133, MIP-134, MIP-135, MIP-136, MIP-137, MIP-138, MIP-139, MIP-140, MIP-141, MIP-142, MIP-143, MIP-144, MIP-145, MIP-146, MIP-147, MIP-148, MIP-149, MIP-150, MIP-151, MIP-152, MIP-153, MIP-154, MIP-155, MIP-156, MIP-157, MIP-158, MIP-159, MIP-160, MIP-161, MIP-162, MIP-163, MIP-164, MIP-165, MIP-166, MIP-167, MIP-168, MIP-169, MIP-170, MIP-171, MIP-172, MIP-173, MIP-174, MIP-175, MIP-176, MIP-177, MIP-178, MIP-179, MIP-180, MIP-181, MIP-182, MIP-183, MIP-184, MIP-185, MIP-186, MIP-187, MIP-188, MIP-189, MIP-190, MIP-191, MIP-192, MIP-193, MIP-194, MIP-195, MIP-196, MIP-197, MIP-198, MIP-199, MIP-200, MIP-201, MIP-202, MIP-203, MIP-204, MIP-205, MIP-206, MIP-207, MIP-208, MIP-209, MIP-210, MIP-211, MIP-212, MIP-213, MIP-214, MIP-215, MIP-216, MIP-217, MIP-218, MIP-219, MIP-220, MIP-221, MIP-222, MIP-223, MIP-224, MIP-225, MIP-226, MIP-227, MIP-228, MIP-229, MIP-230, MIP-231, MIP-232, MIP-233, MIP-234, MIP-235, MIP-236, MIP-237, MIP-238, MIP-239, MIP-240, MIP-241, MIP-242, MIP-243, MIP-244, MIP-245, MIP-246, MIP-247, MIP-248, MIP-249, MIP-250, MIP-251, MIP-252, MIP-253, MIP-254, MIP-255, MIP-256, MIP-257, MIP-258, MIP-259, MIP-260, MIP-261, MIP-262, MIP-263, MIP-264, MIP-265, MIP-266, MIP-267, MIP-268, MIP-269, MIP-270, MIP-271, MIP-272, MIP-273, MIP-274, MIP-275, MIP-276, MIP-277, MIP-278, MIP-279, MIP-280, MIP-281, MIP-282, MIP-283, MIP-284, MIP-285, MIP-286, MIP-287, MIP-288, MIP-289, MIP-290, MIP-291, MIP-292, MIP-293, MIP-294, MIP-295, MIP-296, MIP-297, MIP-298, MIP-299, MIP-300, MIP-301, MIP-302, MIP-303, MIP-304, MIP-305, MIP-306, MIP-307, MIP-308, MIP-309, MIP-310, MIP-311, MIP-312, MIP-313, MIP-314, MIP-315, MIP-316, MIP-317, MIP-318, MIP-319, MIP-320, MIP-321, MIP-322, MIP-323, MIP-324, MIP-325, MIP-326, MIP-327, MIP-328, MIP-329, MIP-330, MIP-331, MIP-332, MIP-333, MIP-334, MIP-335, MIP-336, MIP-337, MIP-338, MIP-339, MIP-340, MIP-341, MIP-342, MIP-343, MIP-344, MIP-345, MIP-346, MIP-347, MIP-348, MIP-349, MIP-350, MIP-351, MIP-352, MIP-353, MIP-354, MIP-355, MIP-356, MIP-357, MIP-358, MIP-359, MIP-360, MIP-361, MIP-362, MIP-363, MIP-364, MIP-365, MIP-366, MIP-367, MIP-368, MIP-369, MIP-370, MIP-371, MIP-372, MIP-373, MIP-374, MIP-375, MIP-376, MIP-377, MIP-378, MIP-379, MIP-380, MIP-381, MIP-382, MIP-383, MIP-384, MIP-385, MIP-386, MIP-387, MIP-388, MIP-389, MIP-390, MIP-391, MIP-392, MIP-393, MIP-394, MIP-395, MIP-396, MIP-397, MIP-398, MIP-399, MIP-400, MIP-401, MIP-402, MIP-403, MIP-404, MIP-405, MIP-406, MIP-407, MIP-408, MIP-409, MIP-410, MIP-411, MIP-412, MIP-413, MIP-414, MIP-415, MIP-416, MIP-417, MIP-418, MIP-419, MIP-420, MIP-421, MIP-422, MIP-423, MIP-424, MIP-425, MIP-426, MIP-427, MIP-428, MIP-429, MIP-430, MIP-431, MIP-432, MIP-433, MIP-434, MIP-435, MIP-436, MIP-437, MIP-438, MIP-439, MIP-440, MIP-441, MIP-442, MIP-443, MIP-444, MIP-445, MIP-446, MIP-447, MIP-448, MIP-449, MIP-450, MIP-451, MIP-452, MIP-453, MIP-454, MIP-455, MIP-456, MIP-457, MIP-458, MIP-459, MIP-460, MIP-461, MIP-462, MIP-463, MIP-464, MIP-465, MIP-466, MIP-467, MIP-468, MIP-469, MIP-470, MIP-471, MIP-472, MIP-473, MIP-474, MIP-475, MIP-476, MIP-477, MIP-478, MIP-479, MIP-480, MIP-481, MIP-482, MIP-483, MIP-484, MIP-485, MIP-486, MIP-487, MIP-488, MIP-489, MIP-490, MIP-491, MIP-492, MIP-493, MIP-494, MIP-495, MIP-496, MIP-497, MIP-498, MIP-499, MIP-500, MIP-501, MIP-502, MIP-503, MIP-504, MIP-505, MIP-506, MIP-507, MIP-508, MIP-509, MIP-510, MIP-511, MIP-512, MIP-513, MIP-514, MIP-515, MIP-516, MIP-517, MIP-518, MIP-519, MIP-520, MIP-521, MIP-522, MIP-523, MIP-524,					